

STATE OF NEVADA
DEPARTMENT OF CONSERVATION AND NATURAL RESOURCES
DIVISION OF ENVIRONMENTAL PROTECTION
BUREAU OF AIR POLLUTION CONTROL

**Director's Review and Preliminary Determination of Permit Issuance
for
Toquop Energy, LLC, Toquop Energy Project
December 17, 2007**

Toquop Energy, LLC (Toquop) has submitted an application for a new Class 1 Operating Permit to Construct (OPTC) to the Nevada Division of Environmental Protection - Bureau of Air Pollution Control (NDEP-BAPC). The Prevention of Significant Deterioration (PSD) Permit application was submitted on February 12, 2007 and deemed complete on DATE, 2007. The facility is proposed to be located on property approximately fourteen miles northwest of Mesquite, Nevada, in Lincoln County.

The NDEP-BAPC has reviewed the application and has made a preliminary determination to issue the Class I Operating Permit to Construct.

The project consists of one 750 megawatt, nominal, (MW) pulverized coal-fired boiler; two auxiliary boilers; coal unloading, storage, reclaim and crushing operations; fly ash, bottom ash, activated carbon, gypsum and quicklime handling and storage operations; one 1,060,000 gallon distillate fuel storage tank; and one each, diesel-powered emergency fire water pump and generator.

Proposed emission estimates indicate that the Toquop Energy Project will be a Major Stationary Source because emissions of NSR regulated pollutants are greater than 100 tons per year (tpy) and the facility is defined as 1 of 28 source categories.

<i>Facility-Wide Potential to Emit</i>		
Pollutant		TPY
PM	(Particulate Matter)	326.0
PM₁₀	(Particulate matter <10 microns in diameter)	856.0
NO_x	(Oxides of Nitrogen)	1,614.0
CO	(Carbon monoxide)	2,656.0
VOC	(Volatile Organic Compounds)	83.0
SO₂	(Sulfur Dioxide)	1,352.0
HAPs (all)	(Hazardous Air Pollutants)	87.0
H₂SO₄ Mist	(Sulfuric Acid Mist)	133.0

The proposed project is to be located in Hydrographic Area (HA)-222, an air management area triggered previously for PSD increment for particulate matter less than 10 microns in diameter (PM₁₀), sulfur dioxide (SO₂) and oxides of nitrogen (NO_x). For this proposed facility, two ambient air impact studies were required: one to demonstrate compliance with the Nevada Ambient Air Quality Standards (NAAQS), and one to demonstrate compliance with the allowable PSD Significant Impact Levels.

The air quality analyses demonstrate that the emissions from the proposed processes will not cause or contribute to a violation of any applicable federal or state ambient air quality standard. Pursuant to the Federal PSD provisions, the project must employ the Best Available Control Technology (BACT) for emissions controls. After review of the application and air quality analysis, the agency has determined that the proposed project may be constructed and operated without an adverse impact on air quality and will not cause or contribute to an increment exceedence.

The proposed source must comply with all State and Federal air quality requirements and all conditions established within the proposed Operating to Construct Permit.

The results of the preliminary modeling analysis indicate that the air quality impacts from the Toquop facility exceeded the PSD significant impact levels for NO₂, SO₂ and PM₁₀, therefore, a full impact analysis was subsequently performed for these pollutants. The table below exhibits the results of the preliminary modeling analysis.

TABLE – Results of the Preliminary Modeling Analysis

Pollutant	Averaging Period	Significant Impact Level (Class 2 areas) (µg/m ³)	Maximum Modeled Concentration (1-year of On-Site Met Data) (µg/m ³)	Modeled Concentration Exceeds Class 2 SIL?
CO	8-hour	500.0	80.159	NO
CO	1-hour	2,000.0	599.015	NO
NO ₂	Annual	1.0	6.549	YES
SO ₂	Annual	1.0	0.308	NO
SO ₂	24-hour	5.0	3.821	NO
SO ₂	3-hour	25.0	32.404	YES
PM ₁₀	Annual	1.0	5.015	YES
PM ₁₀	24-hour	5.0	22.690	YES
Pb	Quarterly	N/A	0.013	N/A

The results of the full impact analysis for NAAQS evaluation, from the proposed Toquop facility, are summarized in the table below.

TABLE – Summary of Full Impact Analysis for NAAQS Evaluation

Pollutant	Averaging Period	NAAQS Standard (µg/m ³)	Ambient Background (µg/m ³)	Modeled Impact (µg/m ³)	Full Air Quality Predicted Impact (Modeled + Background) (1-year of On-site Met data) (µg/m ³)
NO ₂	Annual	100	7.0	6.987	13.987
SO ₂	3-hour	1,300	28.0	56.540	84.540
PM ₁₀	Annual	50	8.8	5.155	13.967
PM ₁₀	24-hour	150	41.0	19.642	60.642

The results of the full impact analysis from NO₂, PM₁₀ and SO₂ for PSD Increment Consumption evaluation is summarized in the table below.

TABLE – Summary of the Full Impact Analysis for PSD Increment Consumption

Pollutant	Averaging Period	PSD Increment Standard (Class II area) (µg/m ³)	Full Air Quality Impact (1-year of On-Site Met data) (µg/m ³) ¹
NO ₂	Annual	25	6.987
SO ₂	3-hour	512	56.540
PM ₁₀	Annual	17	5.167
PM ₁₀	24-hour	30	19.642